HealthCare

CSO Customer Support Operations

Installation Planning and Technical Data

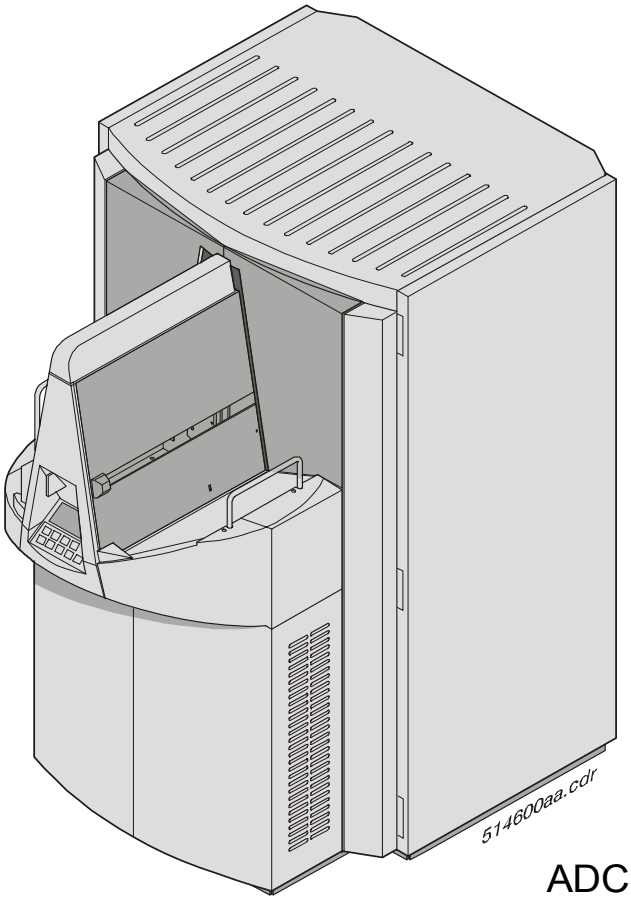
Order-No.: DD+DIS025.01E

1 Piece UOCX7 MA1

ADC Compact Plus

Type 5146 / 100/200

1st Edition



ADC Compact Plus
Digitizer
Type 5146
Base: cPCI

The Installation Planning Instructions are separately available. Order No: DD+DIS025.01E

printed in Germany 11 / 2001

AGFA

Chapter 11

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This document describes the Installation Planning of the ADC Compact Plus Digitizer, Type 5146 / 100/200.

For the Installation Planning of the ADC Solo Digitizer,
ADC ID Station / ADC Processing Station (ADC System), please refer to the following documents:

ADC Solo Digitizer: DD+DIS217.98E

ADC System: DD+DIS003.00E

1 Safety

1.1 General Safety Instructions

- The ADC Compact Plus has been designed for scanning medical X-ray image plates and should only be used for these purposes.
- The ADC Compact Plus must only be operated by qualified staff trained on the machine.
- Make sure that the ADC Compact Plus is constantly monitored in order to avoid inappropriate handling, especially by children.
- Only trained service personnel must make repairs. Only authorized service personnel must make changes to the ADC Compact Plus.
- If there is any visible damage to the machine casing, do not start nor use the ADC Compact Plus.
- If you want to connect the ADC Compact Plus with other devices, components or assemblies and if the technical data do not permit determining whether the combination with these devices, components or assemblies involves hazards, you must consult the respective manufacturers to avoid danger for operating personnel or the environment.
- Do not override or disconnect the integrated safety features.
- Switch off the ADC Compact Plus before performing any maintenance work or repairs. Disconnect the ADC Compact Plus from the mains before making repairs or performing any maintenance activities.
- As is the case for all technical devices, the ADC Compact Plus must be operated, cared for and serviced correctly.
- If you don't operate the ADC Compact Plus correctly or if you don't have it serviced correctly, Agfa-Gevaert is not liable for resulting disturbances, damages or injuries.
- When installing the ADC Compact Plus, care must be taken to ensure that there is either a mains plug or an all-cable disconnecting device in the internal installation fitted near the ADC Compact Plus and that it is easily accessible.
- If you notice conspicuous noise or smoke, disconnect the ADC Compact Plus immediately.

- Check that the mains voltage is within the specified range of the self adapting power supply of the machine.
- You can hurt your fingers if they are caught between the ADC Cassette and the edge of the input slot. Insert the cassette in the input buffer as described in the User Manual. At all times, keep your fingers clear of the input slot. As soon as the ADC Compact Plus takes in the cassette, release it.

Warning Label at the Input buffer of the ADC Compact Plus.

1.2 Safety Instructions for Laser Products

The ADC Compact Plus is a class 1 Laser Product. It uses internallya 2 x 50mW laser diode, classification class IIIb.

Under normal operating conditions - when both doors are closed - there can be no laser radiation outside the ADC Compact Plus. It is nonetheless imperative that the local radiation safety regulations regarding the protection of staff against scattered radiation are complied with, if the ADC Compact Plus is located in the immediate vicinity of an X-ray room.

Open the front left and right door only to solve cassette or image plate jams. When you open either of the doors, the power supply of all critical components is switched off automatically as a precaution.

User interventions other than those described in this manual can be hazardous with regard to laser radiation.

1.3 Safety Instructions for Cassette Unit

The Rotation drive of the Cassette Unit turns very fast!

Keep away when machine is run with doors opened (e.g. for repair, maintenance).

1.4 Safety Regulations

Installation Regulations

Electrical installations in the installation room must be in compliance with:

- IEC 60364 (e.g. for Germany: VDE 0100) regulations for Europe,
- NEC for USA / Canada.

Prior to any electrical installation , the local regulations for electrical installations have to be consulted as well.

A ground fault circuit interrupter (GFCI) is recommended, but not compulsory.

Mains Connection

Connection via plug and socket.

Certificates

- The ADC COMPACT Plus Digitizer is in compliance with EG regulation 93/42/EEC (Medical device).
- The ADC COMPACT Plus Digitizer is tested in compliance with:
  - IEC 60950/EN 60950: 1992; A1: 1993; A2: 1993; A3: 1995; A4: 1997
  - IEC 601-1-1
  - EN 60601-1
  - EN 60825-1:1994 + A11:1996
  - UL1950; CSA 22.2 No.950
  - UL2601
  - The ADC COMPACT Plus Digitizer is UL / CUL classified.
    - E166741

Radio Interference Suppression

It is hereby certified that the ADC COMPACT Digitizer has interference suppression according to EN 55011 Class B as well as FCC Rules CR47 Part 15 Class A (North-America).

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart B of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in an residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

2 Scope of Delivery and Accessories

Pieces	Description
1	ADC Compact Plus Digitizer
1	Base plate
1	Installation Instructions
1	Installation Report
1	ADC Compact Plus user manual information
1	Certificates
6	Floppies
1	Cu-Filter
1	UTP network cable (2 x RJ45 connection)
1	Allen key, size 8
1	Test image CD
1	Connection cable (3 core I-2500-S)
1	Connection cable (Hospital Grade)
2	Adjustable bases, riveted

3 System Overview

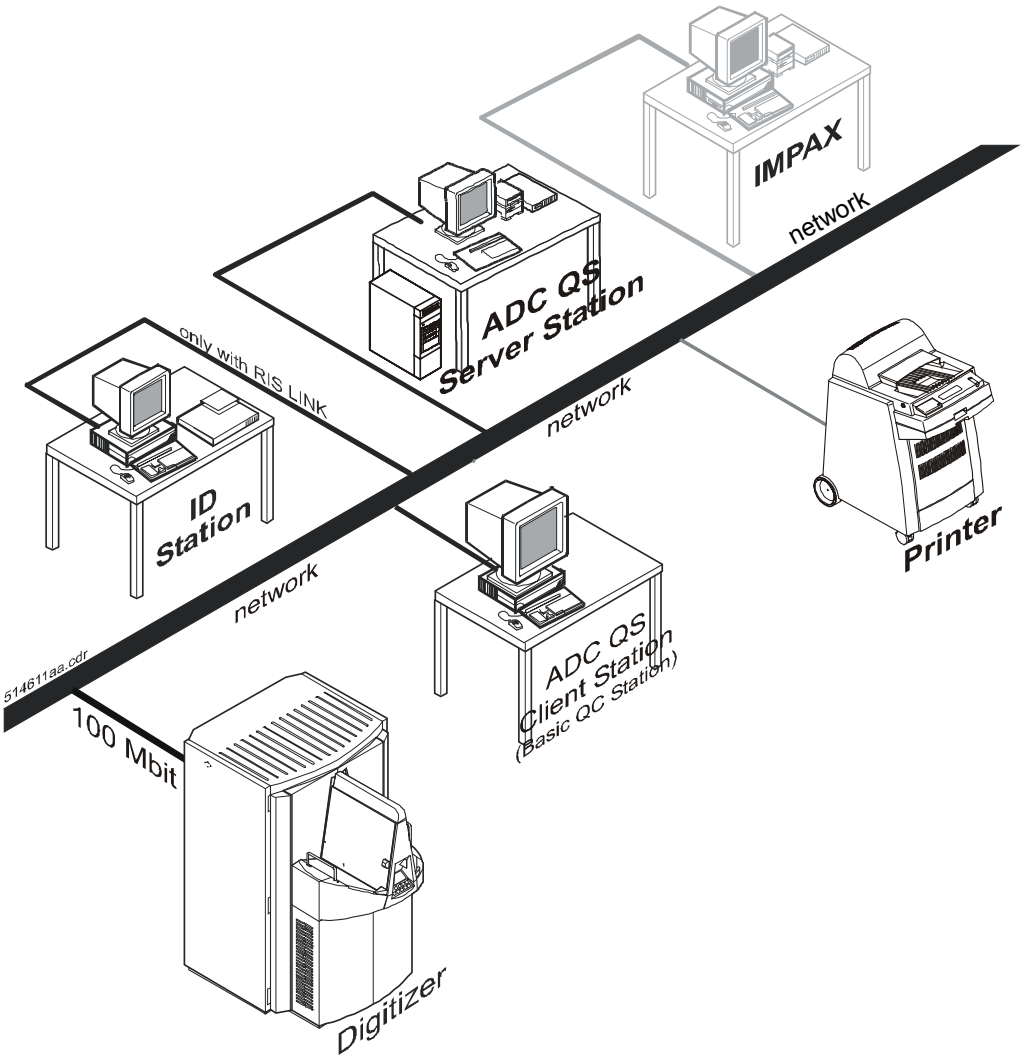


Figure 1

The above example shows the Digitizer connected to a WIN NT based ADC Quality System (ADC QS). It may as well be connected to a Unix based ADC System (VIPS Processing Station).

4 Machine Dimensions and Transport Path

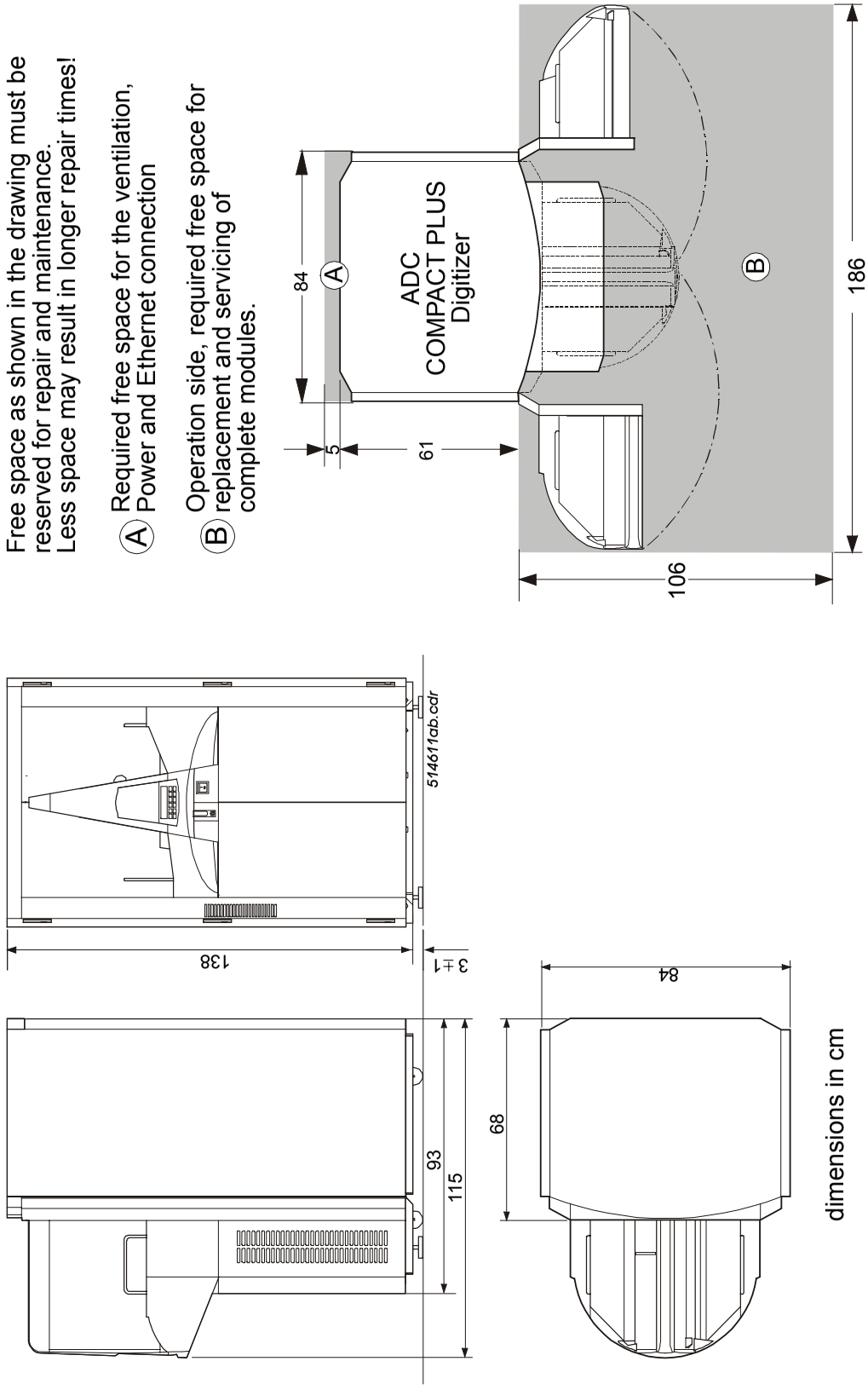
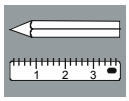


Figure 2



A 1:1 template of the machine's footprint can be ordered under DD+DIS141.98E

It must be possible to transport the digitizer through all hallways and doors up to the installation site.

The smallest machine dimension is **84cm.**

The machine dimensions are **142cm x 84cm x 115cm (HxWxD)**.

Once the machine is unpacked, it can be moved to the installation site on four mounted rollers.

To remove the machine off the pallet a minimum space of **100cm x 500cm** is required.

Make sure that the floor covering is solid enough to stand the weight of the digitizer.

5 Climatic and ambient Conditions

All specifications in this chapter apply on unpacked digitizer.

Temperature and Humidity

Ambient temperature	15°C min. / 59°F min. 30°C max. / 86°F max. 20°C ideal / 68°F ideal
Rate of change of temperature	0.5°C per min. / 0.9°F per min.
Relative Humidity (at 25°C / 77°F ambient temp.)	10% min. 80% max. 40-50% ideal

Light Tightness

Tightness	SAL_{MIN} still met at 2500 lux ambient light

The digitizer must not be operated in direct sunlight exposure.

Floor Conditions

Base	Digitizer stands on a metal plate, 2mm thickness
Horizontal Alignment	Digitizer works without leveling, horizontal alignment is not required. Nevertheless, the digitizer should be run preferably in a horizontal position. Take care that the digitizer can not tilt at the installation site.

Magnetic Fields

max. permissible magnetic field in the room	according to EN 61000-4-8: Level 5

Emissions

Noise level	during scanning max. 65 dB (A) stand-by mode / idle max. 46 dB (A)
Heat dissipation	0.8 kWh / 2730 BTU per hour at max. throughput with 35x43 cm IP

6 Electrical Connections

6.1 External Fuse Protection

Fuse	Rated voltage (single phase)
max. line fuse 16 A	240 V +/- 10 %
max. line fuse 16 A	230 V +/- 10 %
max. line fuse 15 A	208 V +/- 10 % (e.g. USA)
max. line fuse 15 A	200 V +/- 10 % (e.g. Japan)

6.2 Power Connection

Single phase connection, operable on 50 Hz and 60 Hz.
ADC Compact Plus has an automatic voltage selector. Voltage is adapted automatically as soon as the machine is switched on. The selected voltage is displayed on a LED at the inner side of the right door.

6.3 Connection Cables

Two cables are included as standard delivery:

- USA/Japan: Nema 6-15P
- Europe: CEE(7)VII 250 V/16 A

6.4 Network Connection

UTP network cable, 5 m long, (2 x RJ45 connection)

7 Specifications

7.1 Type Overview

Digitizer	ADC Compact Plus
Type	5146

7.2 Electrical Data

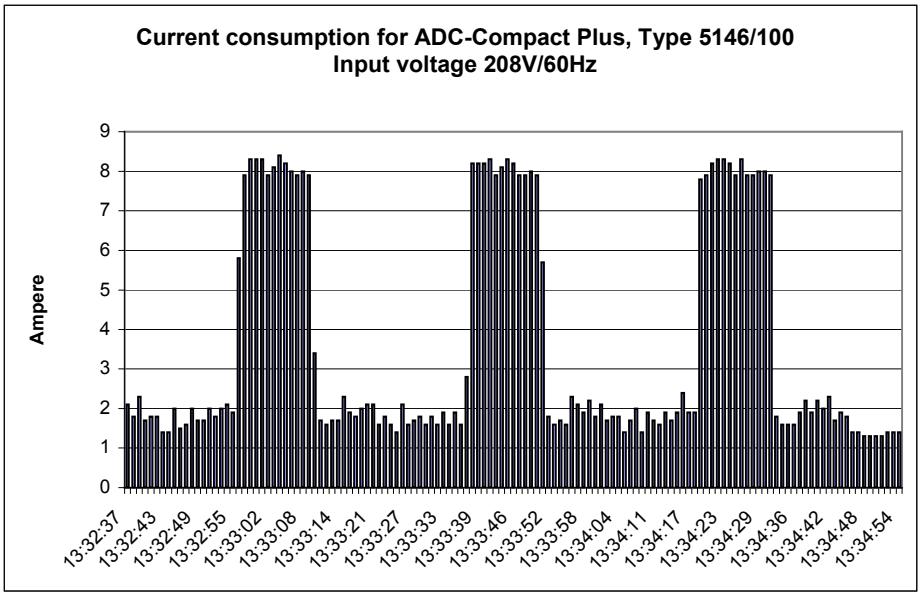
Rated Voltage [~V]	230V - 240V (16A) 200V - 208V (15A)
Frequency [Hz]	50 / 60
Power consumption [W]	Standby approx. 300 W Maximum approx. 1700 W (= 8.5 A)
Leakage current **264 V, 50Hz** **132 V, 60Hz (center tab, USA)**	 < 0.5mA < 0.3mA

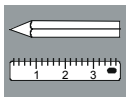
Typical Current Consumption for ADC-Compact Plus*

Type 5146/100	Standby	IP-Handling	Handling and erase
Current by 200V	< 1,5A	< 2,5A	< 9A
Current by 208V	< 1,5A	< 2,5A	< 8,5A
Current by 230V	< 1,5A	< 2A	< 8,5A

* The maximal current is the erasure of IPs. The erasure time depends on X-ray dose and IP size.

Example





7.3 Packing Dimensions and Weights

7.3.1 Package

Packed on a pallet the size is:

Height	159cm
Width	100cm
Depth	132cm

7.3.2 Weights

Digitizer without package	approx. 320 kg
Digitizer with package	approx. 450 kg

7.3.3 Transport Conditions

Temperature	-25°C / -13°F for 72 hrs. +55°C / 131°F for 96 hrs.
Relative Humidity	5% to 95%

8 Installation Planning Checklist

In order to avoid any unnecessary delays during the installation and the machine start-up, the following points of the checklist below should be carried out prior to the installation.
Check and discuss all the required measures for the installation by means of this checklist. Remarks on the individual items may be made on the back of the list.

We ask you to give this checklist then to your local A-G representative.

Customer: .....
.....

Department: .....
.....

System components: .....
.....
.....
.....

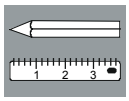
.....
.....

.....
.....

.....
.....

Desired installation date: ..... **Signed:** .....
..... Signature
.....

Remarks:



8.1 Checklist

Subject	Prepared:	OK	NOK
Required external connections	Fixed connection via an all-pole main switch or connection via plug and socket approx. 30 cm from the floor. Type 5146/100/200: Cables USA/Japan: Nema 6-15P Europe: CEE(7)VII 250V/16A	❒	❒
Mains connection	Appointment with the house electrician or authorized electrician for the mains connection has been made?	❒	❒
Network connection	Ethernet connection (Twisted pair) prepared	❒	❒
Direct Remote Access	Remote Access must be guaranteed!	❒	❒
Transport path	Transport to the installation site, unpacking and taking the machine off the pallet must be done by the carrier.		
	Transport path (≥ 84cm) for the ADC COMPACT PLUS Digitizer: Way:	❒	❒
	Free space for taking the machine off the pallet defined? (5 x 1 m) Place:	❒	❒

9 Form to fill in the Network Parameters

Digitizer	Example	1st Digitizer	2nd Digitizer	Remarks
hostname	adcc1			
ip_addr.	192.9.200.199			
Subnet_mask				
default router				
AE_title	ADCC1			
Station Name *	ADCC1			

ADC QS Server Station [1]	Example	1st Server Station	2nd Server Station	Remarks
hostname	adc_qs			
ip_addr.	192.9.200.202			
subnet_mask				
default router				
AE_title	ADC_QS			
Station Name *	ADC_QS			

[1] or ADC (VIPS) Processing Station.

ID - Station	Example	1st ID-Station	2nd ID-Station	Remarks
hostname	id207			
ip_addr.	192.9.200.207			
Subnet_mask				
default router				
AE_title	ID207			
Station Name *	ID207			

= main components

ADC QS Client Station [2]	Example	1st Client Station	2nd Client Station	Remarks
hostname	qc206			
ip_addr.	192.9.200.206			
Subnet_mask				
default router				

[2] or ADC Preview Station

Hard Copy Printer	Example	1st HCP	2nd HCP	Remarks
hostname	mg1			
ip_addr.	192.9.200.201			
Subnet_mask				
default router				
AE_title	ADC_LR1			
Station Name *	ADC_LR1			

PACS Archive Station	Example	1st Archive Station	2nd Archive Station.	Remarks
hostname	simas1			
ip_addr.	192.9.200.101			
Subnet_mask				
default router				
AE_title	SIMAS1			
Station Name *	IMPAX			

*) Friendly name (Station name) appears in the USER interface

Site filled in by Date

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